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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,693	01/26/2004	Roberto Puon	710101.1260	9183

24504 7590 10/09/2007  
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EXAMINER

TODD, GREGORY G

ART UNIT	PAPER NUMBER
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2157

MAIL DATE	DELIVERY MODE
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10/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/764,693

Applicant(s)

PUON ET AL.

Examiner

Gregory G. Todd

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>01/26/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This is a first office action in response to application filed, with the above serial number, on 26 January 2004 in which claims 1-16 are presented for examination. Claims 1-16 are therefore pending in the application.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4, 6-9, 11, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Gale et al (hereinafter "Gale", 6,868,509).

As per Claim 1, Gale teaches a network router, comprising:

a layer 1 portion having a first communication interface and a second communication interface, said first communication interface configured to communicate with a first network over a first data path and said second communication interface configured to communicate with a second network over a second data path (at least col. 5:46-54; col. 7:36-63; col. 6:15-29; Fig. 3; fault router w/ 2 comm. ports connected to network connections);

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a layer 3 portion having a routing table, said layer 3 portion configured to provide a plurality of data packets destined for a particular destination (at least col. 6:15-64; routing table);

a layer 2 portion configured to interface at least one of said data packets with said first communication interface (at least col. 6:15-64; communication stacks); and

switching logic configured to automatically initiate a layer 2 switch such that said layer 2 portion begins to interface said data packets with said second communication interface in lieu of said first communication interface, wherein said layer 2 switch is transparent to said layer 3 portion (at least col. 5:30-35; col. 6:15-64; fault router using networking/switch logic to route communications to non-faulted network).

As per Claim 4. The router of claim 1, wherein said first data path comprises a T1 link (at least col. 5:46-54).

As per Claim 6, Gale teaches a network router, comprising:

a first protocol stack configured to provide a plurality of data packets to be transmitted by said router to a particular destination (at least col. 6:15-64; Fig. 3; router and communication stacks);

a second protocol stack; a third protocol stack (at least col. 6:15-64; communication stacks);

a plurality of network interfaces configured to receive data packets from said first protocol stack, wherein said first protocol stack is configured to provide each of said

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plurality of data packets to one of said network interfaces (at least col. 5:46-54; col. 7:36-63; col. 6:15-29; Fig. 3; fault router w/ 2 comm. ports connected to network connections); and

switching logic configured to receive each of said plurality of data packets from said one network interface, said switching logic configured to provide at least one of said plurality of data packets to said second protocol stack and to provide, in response to a detection of an error condition, at least one other of said plurality of said data packets to said third protocol stack (at least col. 5:30-35; col. 6:15-64; fault router using networking/switch logic to route communications to non-faulted network).

As per Claim 7. The system of claim 6, further comprising: a first communication interface configured to transmit, over a first data path to said particular destination, each of said plurality of data packets provided to said second protocol stack; and a second communication interface configured to transmit, over a second data path to said particular destination, each of said plurality of data packets provided to said third protocol stack (at least col. 6:15-64; routing table for routing to respective network).

As per Claim 8. The system of claim 7, wherein said protocol stacks, said network interfaces, said switching logic, and said communication interfaces are each integrated within a housing unit (at least Fig. 3:313; col. 6:15-29; fault router).

As per Claim 9. The router of claim 6, wherein said first protocol stack is within a layer 3 portion of said router, and wherein said second and third protocol stacks are both within a layer 2 portion of said router (at least col. 5:46-54; col. 7:36-63).

Claims 11 and 16 do not add or define, in substance, any additional limitations over claims 1, 4 and 6-9 and therefore are rejected for similar reasons.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale in view of Simpson et al (hereinafter "Simpson", 7,234,001).

As per Claim 2, Gale teaches the router of claim 1, where said switching logic is configured to automatically initiate said layer 2 switch in response to a detection of an error condition associated with said first data path (at least col. 5:30-35; col. 6:15-64; fault router using networking/switch logic to route communications to non-faulted network).

Gale fails to explicitly teach wherein said switching logic is further configured to automatically initiate another layer 2 switch, in response to a detection that said error condition is resolved, such said layer 2 portion begins to interface said data packets with said first communication interface in lieu of said second communication interface. However, the use and advantages for using such a system is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Simpson.

Simpson teaches a backup link being activated upon network link failure and deactivating backup link upon recovery (at least col. 2:60-3:18). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, as all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill at the time of the invention.

As per Claim 10, Gale fails to explicitly teach wherein said switching logic is configured to provide at least one of said plurality of data packets to said second protocol stack in response to a determination that said error condition has been resolved. However, the use and advantages for using such a system is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Simpson. Simpson teaches a backup link being activated upon network link failure and deactivating backup link upon recovery (at least col. 2:60-3:18). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, as all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill at the time of the invention.

Claim 12 does not add or define, in substance, any additional limitations over claims 2 and 10 and therefore are rejected for similar reasons.

6. Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale in view of Singh et al (hereinafter "Singh", 2003/0088698).

Gale fails to teach wherein said second communication interface is configured to communicate using point-to-point protocol (PPP). However, the use and advantages for using such a system is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Singh. Singh teaches using PPP communication (at least paragraph 16). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to substitute the use of one known element, PPP of Singh, for another, with the network types of Gale (at least col. 5:45-54).

7. Claims 5 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale in view of Fredette et al (hereinafter "Fredette", 6,987,727).

Gale fails to teach wherein said second communication interface comprises a modem. However, the use and advantages for using such a system is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Fredette. Fredette teaches using a modem to communicate with a network with link failure environment (at least col. 6:12-20). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to substitute the use of one known element, modem of Fredette, for another, with the network types of Gale (at least col. 5:45-54).



As per Claim 15. The method of claim 14, wherein said primary data path comprises a T1 link (at least Gale col. 5:46-54).

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shew et al is cited for disclosing pertinent information related to the claimed invention. Applicants are requested to consider the prior art reference for relevant teachings when responding to this office action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory G. Todd whose telephone number is (571)272-4011. The examiner can normally be reached on Monday - Friday 9:00am-6:00pm w/ first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gregory Todd



Patent Examiner

Technology Center 2100